REMARKS/ARGUMENTS

Upon entry of the present Amendment, claims 7, 8, 9 will have been amended, claims 1-6 and 10-13 canceled, and claims 14-26 newly added. By the present Amendment and Remarks, Applicant respectfully submits that that the rejections have been overcome, and respectfully requests reconsideration of the December 28, 2006 Office Action and allowance of the present application at the Examiner's earliest convenience.

Pending Claims

Claims 7-9, and 14-26 are pending in the application. Of these claims, claims 14, 15, 19, and 23 are independent claims and the remaining claims are dependent claims.

Summary of the Official Office Action

Summary of Objections

Claim 13 was objected to because of an informality that the claim has the same limitation twice where the second instance provides no additional apparent purpose other than to repeat what has already been claimed

Summary of Rejections

Claims 1, 10, 11, 12, and 13 were rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-9 were rejected under 35 U.S.C. 112, second paragraph because these claims depend upon claims rejected under 35 U.S.C. 112, second paragraph.

Claims 1, 2 & 4-13 were rejected under 35 U.S.C. 102(b) as being anticipated in view of Silverbrook et al. (US PGPUB 2002/0080396) [hereinafter referred to as "Silverbrook"].

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US PGPUB 2002/0080396) in view of Tan et al. (US 6,613,403) [hereinafter referred to as Tan].

Response to Claim Objections

In lieu of the present Amendment, since claim 13 has been canceled, thus the rejection associated with this claim is now moot. As such, Applicant respectfully requests the rejection of claim 13 be withdrawn.

Traversal of Rejection under 35 U.S.C. 112, second paragraph

In lieu of the present Amendment, since claims 1 and 10-13 have been cancelled, thus the rejection associated with these claims is now moot. As such, Applicant respectfully requests the rejections of claims 1 and 10-13 be withdrawn.

Traversal of Rejection under 35 U.S.C. 102(b)

In lieu of the present Amendment, claims 7-9 are believed allowable. As such, Applicant respectfully requests that the rejection of claims 7-9 be withdrawn.

Traversal of Rejection under 35 U.S.C. 103(a)

In lieu of the present Amendment, claim 3 has been canceled, thus the rejection of claim 3 is now moot. As such, Applicant respectfully requests the rejection of claim 3 be withdrawn.

Newly Added Claims

Applicant believes that newly added claims 14-26 are allowable, and as such, respectfully requests the Examiner indicate the claims as allowable at the Examiner's earliest convenience.

Newly added claims 14 and 19 describe the present invention's feature of a recording unit in a recording apparatus recording a positional information image with carbon black and image data with carbon-free cyan, magenta, and yellow.

Newly added claims 15 and 23 describe the present invention's feature of a recording unit in a recording apparatus recording a positional information image with carbon black and image data with carbon-free cyan, magenta, yellow, and black.

Newly added claims 16-18, 20-22, and 24-26 depend from one of newly added claims 15, 19, or 23.

Applicant respectfully submits that Silverbrook fails to disclose at least the above-noted features of the present invention.

Silverbrook is seen to describe a system for producing interface surfaces ("netpages") which allow users to interact with networked information and to obtain

interactive printed matter. More specifically, a "netpage" consists of a printed page (or

other surface region) invisibly tagged with references (i.e., tags) to an online description

of the page. The tags may be printed on or into the surface of the page, may be in or on a

sub-layer of the page or may be otherwise incorporated into the page. The online page

description is maintained persistently by a netpage page server. The page description

describes the visible layout and content of the page, including text, graphics and images.

It also describes the input elements on the page, including buttons, hyperlinks, and input

fields. A netpage allows markings made with a netpage pen on its surface to be

simultaneously captured and processed by the netpage system (paragraph 0148).

Tags are printed in infrared-absorptive black ink on any substrate which is

infrared-reflective, such as ordinary paper (paragraph 0151). A tag is sensed by an area

image sensor in the netpage pen, decoded and the data encoded by the tag is transmitted

to the netpage system, preferably via the nearest netpage printer. The pen recognizes the

tag and extracts the page ID and position on every interaction with the page. (paragraph

0152).

According to Silverbrook, in the preferred form of the invention, each tag

identifies the region in which it appears, and the location of that tag within the region. A

tag may also contain flags which relate to the region as a whole or to the tag. One or more

flag bits may, for example, signal a tag sensing device to provide feedback indicative of a

function associated with the immediate area of the tag, without the sensing device having

to refer to a description of the region. (paragraph 0155).

Decoding a tag results in a region ID, a tag ID, and a tag-relative pen transform.

Before the tag ID and the tag-relative pen location can be translated into an absolute

location within the tagged region, the location of the tag within the region must be

known. This is given by a tag map, where each tag ID in a tagged region is mapped to a corresponding function. A tag map reflects the scheme used to tile the surface region with tags. The tag map for a region must be retrievable via the region ID. Thus, given a region ID, a tag ID, and a pen transform, the tag map can be retrieved, the tag ID can be translated into an absolute tag location within the region, and the tag-relative pen location can be added to the tag location to yield an absolute pen location within the region (paragraphs 0193-0195).

A location-indicating tag contains a tag ID which, when translated through the tag map associated with the tagged region, yields a unique tag location with the region. The tag-relative position of the pen is added to this tag location to yield the location of the pen within the region. This in turn is used to determine the location of the pen relative to a user interface element in the page description associated with the region. The user interface element is identified, as well as a location relative to the user interface element. Location-identifying tags therefore trivially support the capture of an absolute pen path in the zone of a particular user interface element. (0198)

According to Silverbrook, in the preferred form of the invention, the tag map is associated with each page instance to allow tags on the page to be translated into locations on the page. (0209).

As discussed above, the location of a tag within a region must be known and is done so through the use of a tag map, where each tag ID in a tagged region is mapped to a corresponding function. Given the fact that the Silverbrook invention requires that the location of a tag within a region must be known, and requires a map to do, the idea of arbitrarily recording tags on a page appears to be inconsistent with the implementation required for the Silverbrook invention to work as described.

Silverbrook also describes a printer capable of recording with cyan, magenta, yellow, black, and IR black recording material [0243].

As the above referenced sections of Silverbrook illustrate, Silverbrook discloses the structure to detect a tag, printed on a recording medium with invisible ink, by a sensor on a pen. The position on the surface of the recording medium can be determined by reading the tag using the pen. The disclosed tag comprises at least 90 bits of region ID (paragraph 0158), which itself shows the position on the recording medium. In other words, encoded information showing the position on the recording medium is already included in the tag. In order to make use of the tag to yield an absolute position of the pen within a region, a tag map mapping each tag ID in a tagged region to a corresponding location is required.

Nothing in Silverbrook is seen to describe recording a positional information image, wherein the positional information is recorded on a recording medium. As indicated above, each of the tags of Silverbrook contain tag ID information, which, when translated through a tag map associated with a tagged region, yields the position of the tag within the region. Since the tags of Silverbrook need to be translated, via the tag map, into locations on the recording medium, arbitrarily recording the tags would not allow for the invention of Silverbrook to work.

In the present invention, the recorded positional information image represents positional information corresponding to the position where the positional information image is recorded. As such, unlike the invention in Silverbrook, the present invention does not require a translation map.

Nothing in Silverbrook is seen to indicate that an individual tag or combination of tags forms or form a positional information image. In other words, there is nothing in

Silverbrook to suggest that the tags form an image representing positional information on the recording medium when the tags are recorded on the recording medium.

Nothing in Silverbrook is seen to describe that carbon-free cyan, magenta, yellow, and black recording materials are used to record the image.

Applicant also respectfully submits that Tan fails to disclose at least the above-noted features of the present invention. As stated in the Summary of the Invention section of Tan, the general object of Tan is to prolong the useful life of near infrared florescent compounds in print media to provide security features, sense marks, and data images which are invisible to the human eye. Nothing in Tan is seen to disclose or describe the present invention's features of recording positional information image and image data, where carbon black recording material is used to record the positional information and at least one of carbon-free magenta, yellow, and cyan, and black recording material is used to record the image data.

CONCLUSION

Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability, and respectfully requests the Examiner to indicate the allowance of such claims as the Examiner's earliest convenience.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein is respectfully requested and now believed to be appropriate.

If any additional fees are required as result of the present Amendment, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Applicant's USPTO Deposit Account number **502456**.

Applicants' undersigned attorney may be reached at (949) 932-3329. All correspondences should be directed to the below-listed address.

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